

REMARKS

Claims 1-2 and 30-31 have been amended. Claims 1-2 and 30-31 remain pending. Reconsideration and reexamination of the application, as amended are requested.

Applicant thanks the Examiner for meeting with Applicant's undersigned Attorney on June 5, 2003. The pending claims relative to the cited references were discussed and also the possibility of Declarations as submitted herein were discussed.

Neither of references JP 07034190 or USP 4375378 to Ohtani et al. disclose the achievement of billets as claimed in claims 1-2 and 30-31 having limitations requiring a billet to have the property of a limiting upsetting ratio of 90% or more without the occurrence of cracks. Applicant's have been able to achieve billets with this property using the disclosed methods and limiting components to the ranges claimed. This is of inventive significance. Applicants will submit, in several days, Declarations as evidence.



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Respectfully Submitted,

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APPLICATION NO.: 09/575348

VERSION SHOWING CHANGES MADE

1. (FIFTH AMENDED) A billet of steel for continuous cold forging, [comprising] consisting essentially of 0.46 - 0.48 wt % of C (carbon), 0.14 wt % or less of Si (silicon), 0.55 - 0.65 wt % of Mn (manganese), 0.015 wt % or less of P (phosphorus), 0.015 wt % or less of S (sulfur), 0.15 wt % or less of Cu (copper), 0.20 wt % or less of Ni (nickel), and 0.35 wt % or less of Cr (chromium), wherein a carbide of the billet is spheroidized and the billet has a limiting upsetting ratio of 90 % or more without the occurrence of cracks.

2. (FIFTH AMENDED) A billet of steel for continuous cold forging, [comprising] consisting essentially of 0.46 - 0.48 wt % of C (carbon), 0.14 wt % or less of Si (silicon), 0.55 - 0.65 wt % of Mn (manganese), 0.015 wt % or less of P (phosphorus), 0.015 wt % or less of S (sulfur), 0.15 wt % or less of Cu (copper), 0.20 wt % or less of Ni (nickel), and 0.35 wt % or less of Cr (chromium), wherein a carbide of the billet is spheroidized and has an aspect ratio of 300 % or less and the billet has a limiting upsetting ratio of 90 % or more without the occurrence of cracks.

30. (TWICE AMENDED) A billet of steel for continuous cold forging [comprising] consisting essentially of 0.46 - 0.48 wt % of C (carbon), 0.14 wt % or less of Si (silicon), 0.55 - 0.65 wt % of Mn (manganese), 0.015 wt % or less of P (phosphorus), 0.015 wt % or less of S (sulfur), 0.15 wt % or less of Cu (copper), 0.20 wt % or less of Ni (nickel), and 0.35 wt % or less of Cr (chromium), wherein a surface of the billet comprises a fine spheroidized structure comprising ferrite and cementite and the billet has a limiting upsetting ratio of 90 % or more without the occurrence of cracks.

31. (TWICE AMENDED) A billet of steel for continuous cold forging, [comprising] consisting essentially of 0.46 - 0.48 wt % of C (carbon), 0.14 wt % or less of Si (silicon), 0.55 - 0.65 wt % of Mn (manganese), 0.015 wt % or less of P (phosphorus), 0.015 wt % or less of S (sulfur), 0.15 wt % or less of Cu (copper), 0.20 wt % or less of Ni (nickel), and 0.35 wt % or less of Cr (chromium), wherein a surface of the billet comprises a fine spheroidized structure comprising ferrite and cementite such that a carbide of the billet has an aspect ratio of 300 % or

less and the billet has a limiting upsetting ratio of 90 % or more without the occurrence of cracks.